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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/536,686	03/28/2000	Yoshiko Sakagawa	48864-026	5237

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EXAMINER

KIBLER, VIRGINIA M

ART UNIT PAPER NUMBER

2623

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/536,686

Applicant(s)

SAKAGAWA ET AL.

Examiner

Virginia M Kibler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 17-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 17-23 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/3/04 has been entered.

Response to Amendment

2. The amendment received on 9/3/04 has been entered. Claims 1-9 and 17-23 remain pending.

Claim Objections

3. Claim 1 is objected to because of the following informalities: "shape model on" should be changed to "shape model" in line 8. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-9 and 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yano et al. (US 6,031,941) in view of Arakawa et al. (US 5,822,450).

Regarding claim 1, Yano et al. ("Yano") discloses a 3-D data input method including generating image data of a 3-D shape model in accordance with the 3-D data inputted from a part of the object, the image corresponding to the shape of the 3-D data (Figure 5, element 55; Col. 3, lines 63-67, Col. 4, lines 1-20). Yano discloses displaying on the monitor screen the image of the 3-D shape model (Figure 3; Col. 4, lines 21-37). Yano discloses inputting images while monitoring the displayed 3-D shape of the object to be measured (Col. 11, lines 65-67, Col. 12, lines 1-5), thereby suggesting displaying the 3-D shape model as a guide image in order to ensure overlapping portions for subsequent shooting. Yano discloses performing a framing 32 of an image of the object that corresponds to the guide image while simultaneously monitoring the guide image 33 (Col. 3, lines 62-67, Col. 4, lines 1-37; Col. 11, lines 65-67, Col. 12, lines 1-5) and shooting the object after the framing is performed (Col. 7, lines 58-64).

Yano does not disclose performing framing so that the guide image is overlapped on an image of the object. However, one of ordinary skill in the art would have expected Applicant's invention to perform equally well with either the guide image taught by Yano or the claimed overlapping of the guide image and an image of the object because both perform the same function of confirming that the desired 3-D data is obtained including overlapping portions to allow image synthesis processing.

Furthermore, Arakawa et al. ("Arakawa") teaches that it is well known generate image data of a 3-D shape model (Col. 8, lines 50-61) and overlap the 3-D shape model with an image of the object that corresponds to the 3-D shape model (Col. 7, 58-67, Col. 8, lines 1-14). At the

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time of the invention, it would have been obvious to one of ordinary skill in the art to have modified the guide image disclosed by Yano to include overlapping the guide image. The motivation for doing so would have been to facilitate the correspondence relationship between the 3-D guide image and the 2-D image corresponding to the 3-D guide image. Therefore, it would have been obvious to combine Yano with Arakawa to obtain the invention as specified in claim 1.

Regarding claim 2, the arguments analogous to those presented above for claim 1 are applicable to claim 2.

Regarding claim 3, Yano discloses a memory 14 for memorizing the 3-D data of the object obtained by the shooting (Figure 2).

Regarding claim 4, Yano discloses the image generator generates the 3-D model image in accordance with the data memorized in the memory (Col. 6, lines 57-67 and Col. 7, lines 1-4).

Regarding claim 5, the arguments analogous to those presented above for claim 1 are applicable to claim 5.

Regarding claim 6, Yano does not appear to recognize matching the image of the input portion with the guide image so that the scale of the guide image agrees with the scale of the object. However, Arakawa teaches that it is known to match the image of the input portion with the guide image so that the scales agree (Col. 8, lines 1-21). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the guiding disclosed by Yano to include the matching as taught by Arakawa because it will facilitate positioning of the object

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Regarding claim 7, Yano discloses the shooting performed for plural positions different from each other (Col. 4, lines 8-13).

Regarding claim 8, Yano discloses the image of the 3-D shape model is retrieved from the memory (Fig. 8, memory 552; Col. 14, lines 15-20).

Regarding claim 9, Yano discloses the plurality of the image of 3-D shape model is memorized (Abstract; Col. 6, lines 57-67 and Col. 7, lines 1-4).

Regarding claims 17 and 20, the arguments analogous to those presented above for claim 1 are applicable to claims 17 and 20. Yano discloses memorizing attribute information in a memory, the attribute information being about data of a 3-D shape model having a shape that is substantially the same as the shape of the object (Col. 6, lines 57-67, Col. 7, lines 1-4) and a position for observing the 3-D shape model (Figure 3).

Regarding claims 18 and 19, the arguments analogous to those presented above for claims 6 and 7 are applicable to claims 18 and 19, respectively.

Regarding claim 21, the arguments analogous to those presented above for claim 6 are applicable to claim 21.

Regarding claims 22 and 23, the arguments analogous to those presented above for claims 3 and 4 are applicable to claims 22 and 23, respectively.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 2, 5, 17, and 20 have been considered but are moot in view of the new ground of rejection.

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Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia M Kibler whose telephone number is (703) 306-4072.

The examiner can normally be reached on Mon-Thurs 8:00 - 5:30 and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Virginia Kibler can be reached on (703) 308-4072. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Virginia Kibler
09/29/04

MEHRDAD DASTOURI
PRIMARY EXAMINER

